For each of the following situations, decide if you would model using a regression or classification model.

1. The amount a person will spend on a given site in the next 24 months.

Regression model.

Because the outcome variable is a continuous variable.

1. What color car someone is going to buy.

Classification

Because the outcome variable can be a categorical variable.

1. How many children a family will have.

Regression will be better – because can’t limit the upper bound for number of children.

1. If someone will sign up for a service.

Classification- because the outcome variable will be either yes or no.

1. The number of times someone will get sick in a year.

Regression is better – because can’t limit the upper bound for this. Someone could be sick every day of the year. Even think the upper bound as 365, considering as a categorical variable of 365 categories would be not feasible.

1. The probability someone will get sick in the next month.

Classification. Because be sick or not are the only two categories and it is asking to find some probability measure for each category.

1. Which medicine will work best for a given patient.

Classification. Because this can’t be a continuous variable.